

No. 897,918.

PATENTED SEPT. 8, 1908.

C. T. MOORE.  
RAILWAY CROSS TIE.  
APPLICATION FILED JULY 9, 1907.

2 SHEETS—SHEET 1.

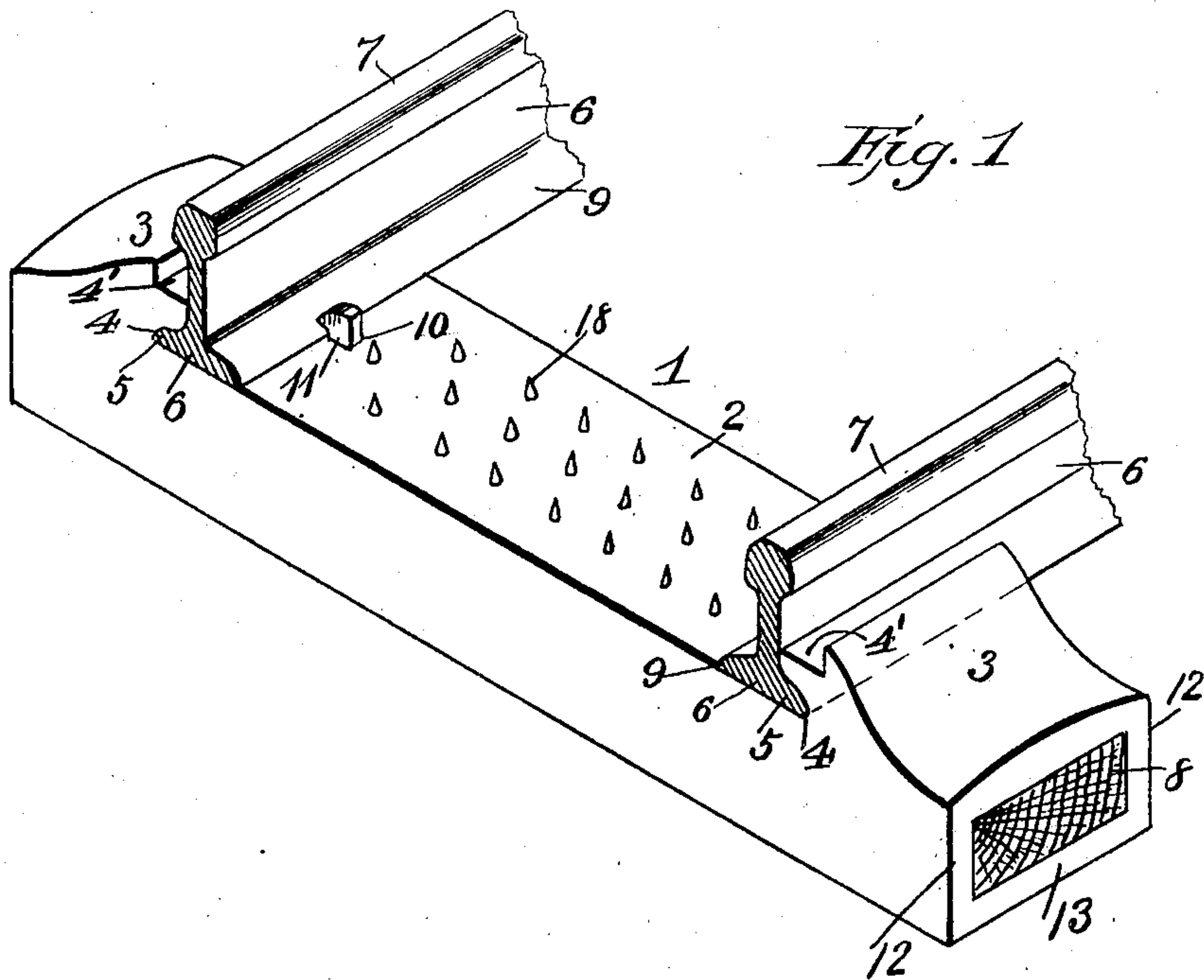


Fig. 1

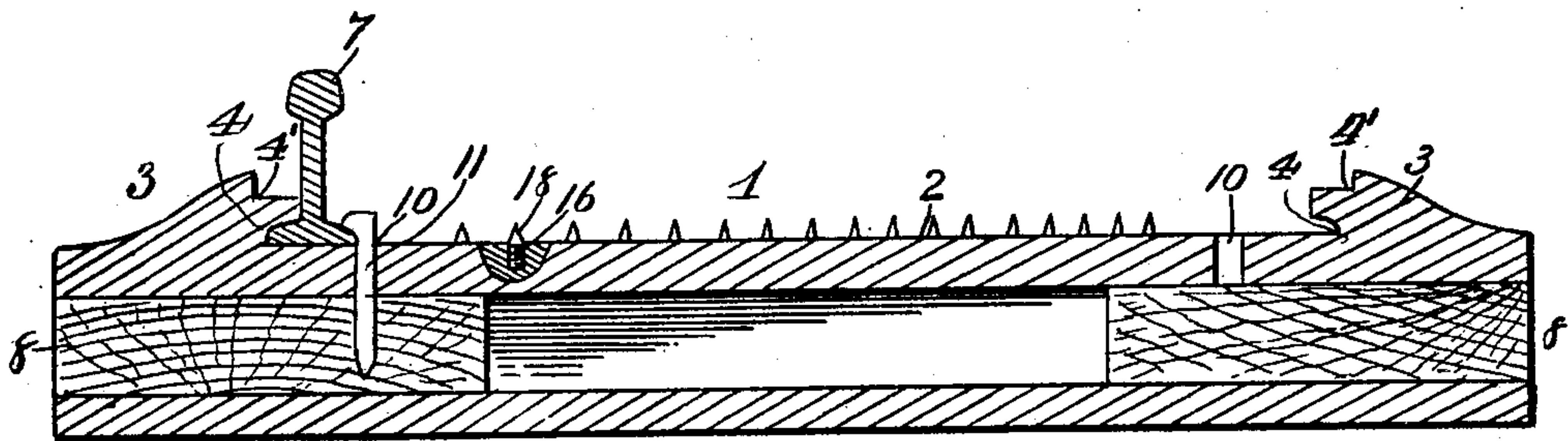


Fig. 2

Witnesses  
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Inventor  
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By John S. Duffie

Attorney

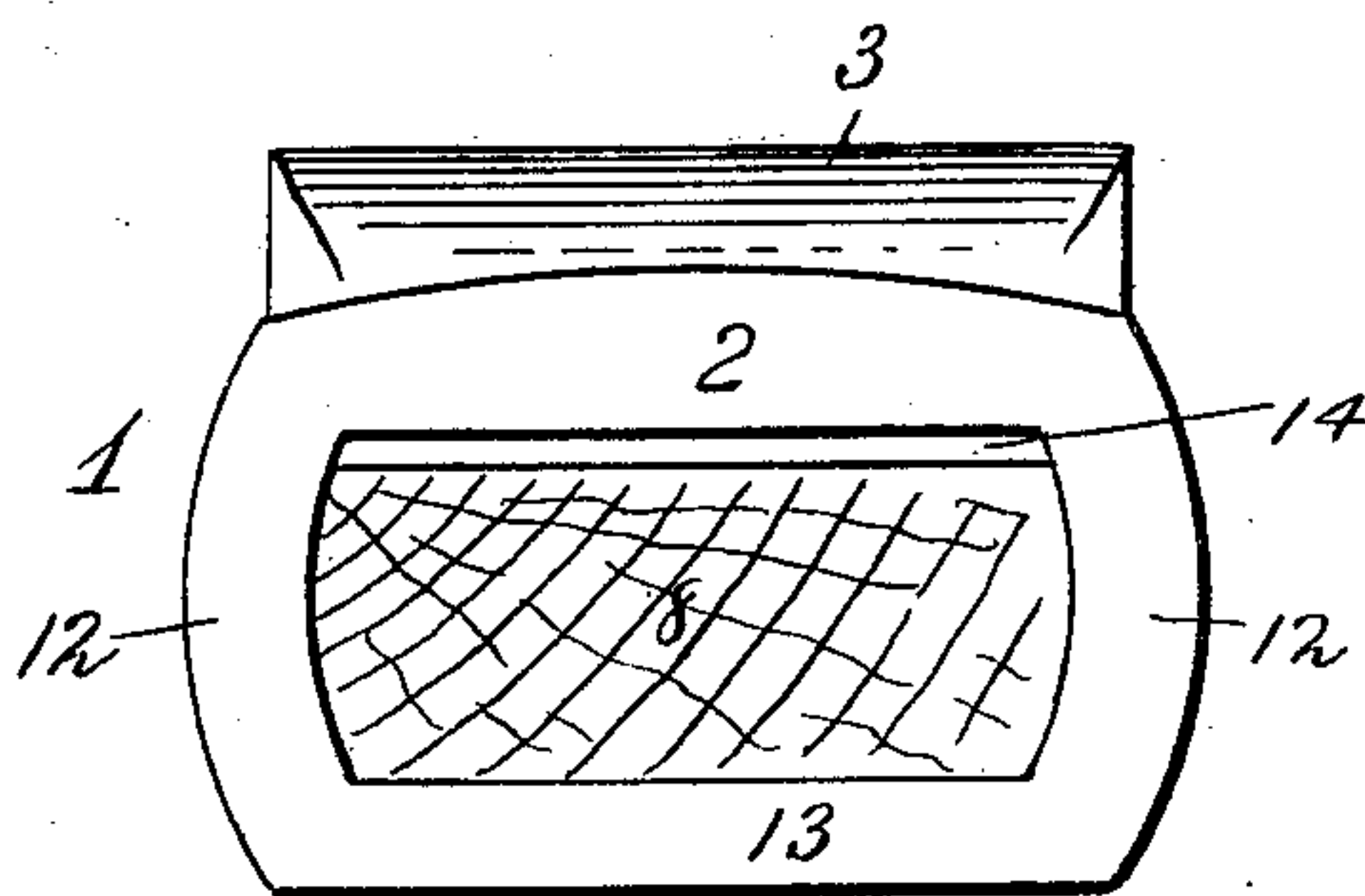
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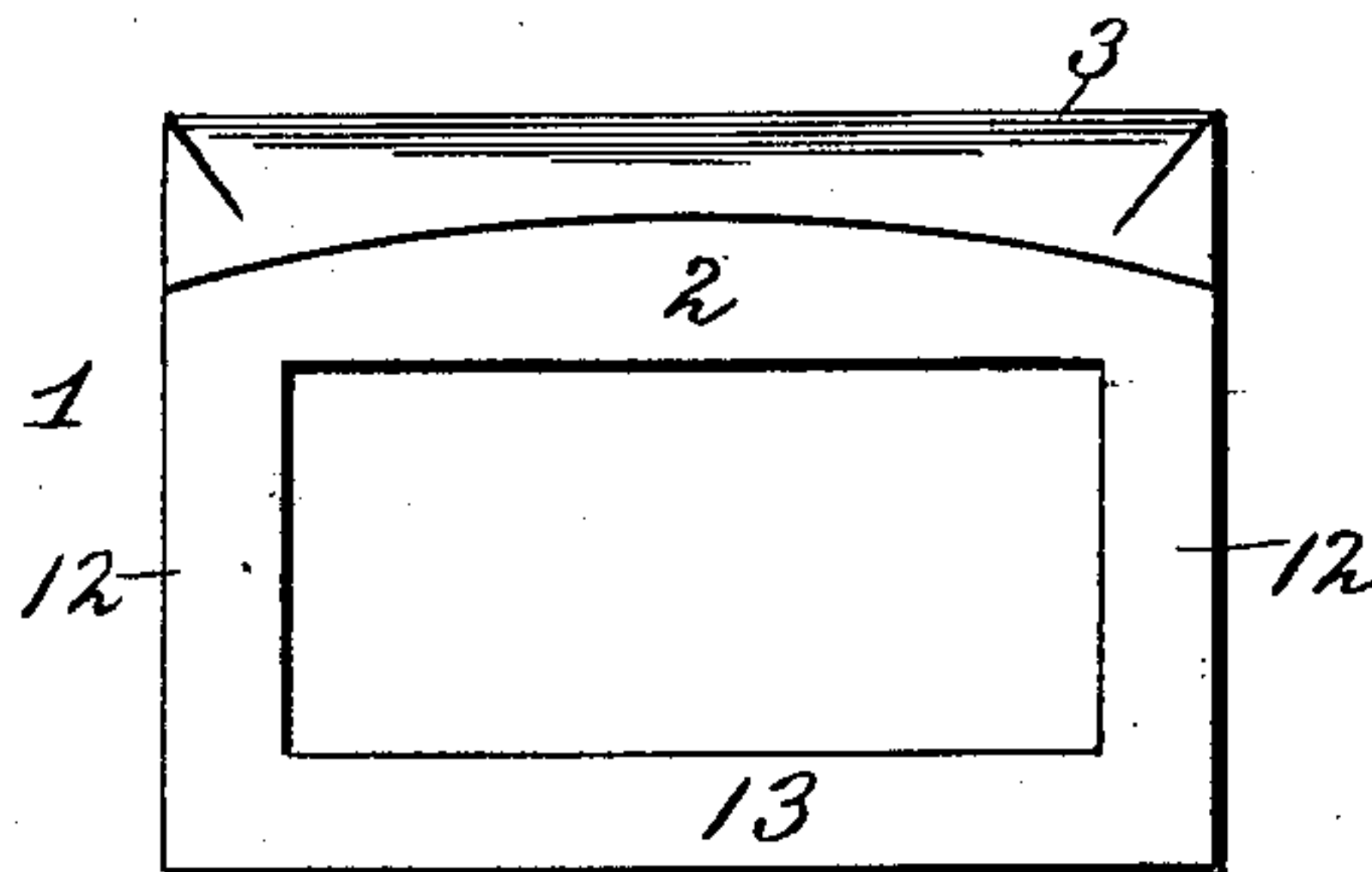
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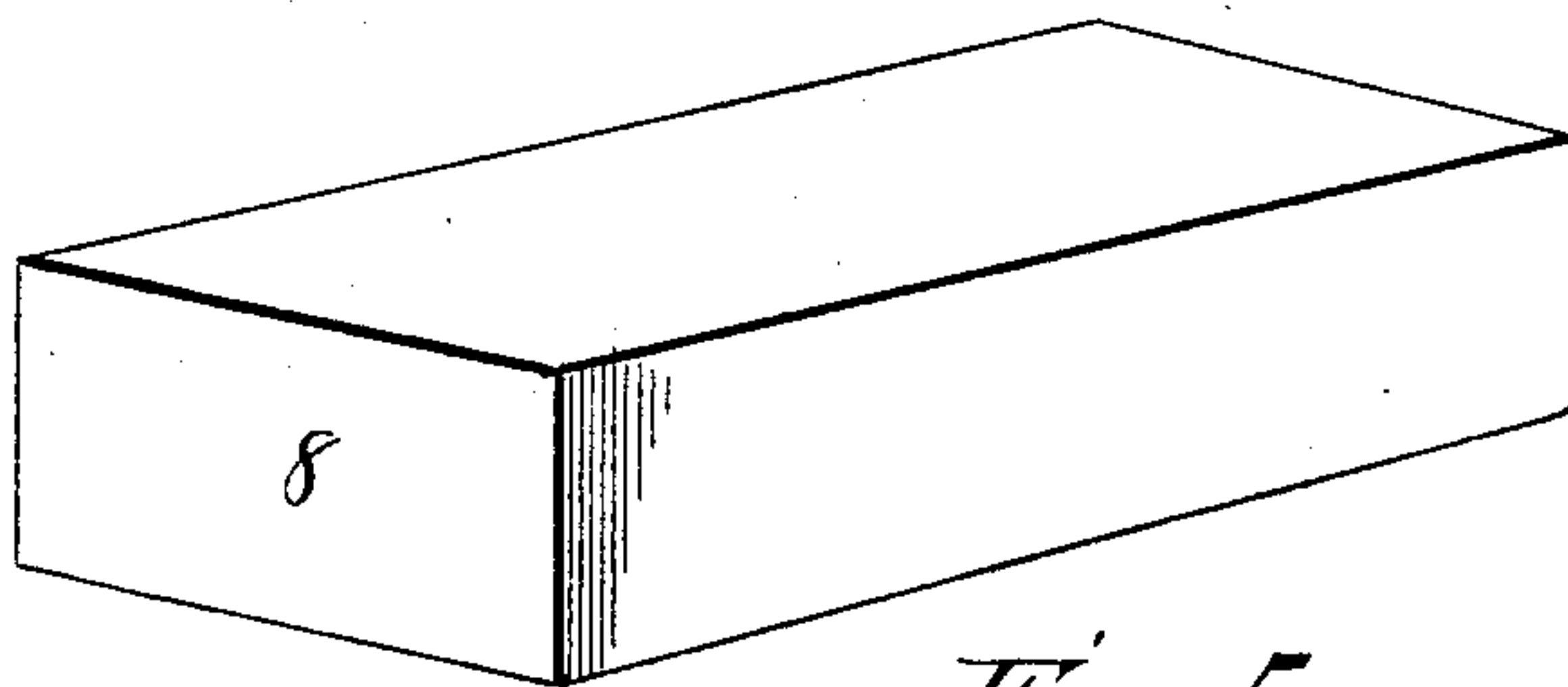
*Fig. 3.*



*Fig. 4.*



*Fig. 6.*



*Fig. 5.*

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# UNITED STATES PATENT OFFICE.

CREED T. MOORE, OF COLT, ARKANSAS.

## RAILWAY CROSS-TIE.

No. 897,918.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed July 9, 1907. Serial No. 382,908.

*To all whom it may concern:*

Be it known that I, CREED T. MOORE, a citizen of the United States, residing at Colt, in the county of St. Francis and State of Arkansas, have invented certain new and useful Improvements in Railway Cross-Ties, of which the following is a specification.

My invention is a railway cross-tie, the purpose of which is to produce a tie that will surely hold the rails in place, and absolutely provide against the spreading of the rails, and a tie that has a certain amount of spring, thus preventing the bumps and jars incident to tracks where the ties have no spring, and a tie that will largely prevent persons, or animals, from walking, lounging or lying on the same.

It is known that one of the chief causes of accident to cars is the spreading of the rails, and one great cause of the wear and tear incident to railway cars is the rigidity and want of spring in the cross-ties. The purpose of having spikes, or sharp-pointed triangular pyramids rising from the upper face of my tie is to prevent persons or cattle from remaining on the track.

In the accompanying drawings, Figure 1, is a perspective view of one form of my railway cross-tie, the rails in place. Fig. 2, is a longitudinal vertical section of Fig. 1. Fig. 3, is an end view of another form of my cross-tie. Fig. 4, is an end view of my cross-tie shown in Fig. 1. Fig. 5, is a perspective view of a block of wood intended to be driven into one of the hollow ends of the cross-tie, while a similar block is driven into the other hollow end of the cross-tie. Fig. 6, represents a sharp-pointed triangular pyramid, having extending downwardly from its base a screw.

My invention is described as follows:—The body 1, of the tie is of metal; any metal that has a certain amount of resiliency will answer. Each end of the tie is provided on its upper face 2, and near each end, with a clamping block 3. Each of these clamping blocks is integral with the tie, and each is provided with an under recess 4, which conforms to the shape of the outer flange 5, of the base 6, of the rail 7, their extreme inner ends fitting against the webs of said rails; each of said blocks is also provided with an upper recess 4<sup>1</sup>; said upper recess is for the purpose of making room for and bracing the fish-bar plates when the ends of the rails meet on a tie. The body of the tie is hollow

its entire length, and fitting in the hollow in each end of the tie is a block of hard wood 8. Inwardly, some little distance from the inner ends of said clamping blocks, are perforations 10, which pass through the upper wall of the tie. There may be one, two or more of these perforations. The rails are firmly held in place by railroad spikes 11, which are driven down through said perforations 10, into the blocks 8, the heads of said spikes clamping the inner flanges of said rails.

As shown in Fig. 1, the sides 12, of the tie are vertical, and stand at right angles to the base 13, but the preferable form of the body of my cross-tie is shown in an end view, Fig. 3, in which case the sides 12, are curved outwardly and the block 8, while it fits the hollow in every other respect, is not quite as thick as the hollow in the metal part of the tie is deep, leaving a little space 14, between the lower face of the upper wall of the tie, and the upper face of the block, thus allowing a certain amount of spring in the metal part of the tie. The upper wall of the tie is provided with a number of threaded, vertical holes 16, in which are screwed the screw part 17, of a number of sharp-pointed, triangular pyramids 18; like holes may be made in the clamping blocks 3, and similar pyramids may be screwed therein if desired; said triangular pyramids, however, may be made integral with the tie.

Although I have specifically described the combination, construction and arrangement of the several parts of my invention I do not confine myself particularly to such specific combination, construction and arrangement, as I claim the right to make such changes and modification therein as may clearly fall within the scope of my invention, and which may be resorted to without departing from the spirit, or sacrificing any of my patentable rights therein.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A hollow railway cross-tie, consisting of a resilient, metal body, whose upper and lower walls are parallel with each other, and whose side walls curve outwardly; clamping blocks, integral with the upper wall of the body of said tie, each having a lower recess 4, adapted to fit over the outer flange of the base of a railway rail, its inner end fitting against the web of said rail; an upper recess 4<sup>1</sup>, adapted to give room for and support fish-



bar plates, said tie provided with perforations through its upper wall, inwardly from the inner ends of said clamping blocks, and wooden blocks fitting in the hollow at each  
5 end of said body, leaving a space between the lower face of the upper wall of said body and the upper side of said block, said tie adapted to carry railway rails and hold the same, by having them fitted in said clamping blocks  
10 and secured by railway spikes passing through said perforations into said blocks, substantially as shown and described and for the purposes set forth.

2. A hollow railway cross-tie, consisting of  
15 a resilient metal body, whose upper and lower walls are parallel with each other, and whose side walls curve outwardly; clamping blocks, integral with the upper wall of the body of said tie, having recesses adapted to  
20 fit over the outer flange of the base of a rail-

way rail, their inner ends fitting against the web of said rail, said tie provided with perforations through its upper wall inwardly from the inner ends of said clamping blocks, and wooden blocks fitting in the hollow at each  
25 end of said body, leaving a space between the lower face of the upper wall of said body and the upper side of said blocks, said perforations adapted to permit railway spikes to pass through the same into the wooden  
30 blocks, and thereby hold railway rails in the recesses and against the ends of said clamping blocks, substantially as shown and described and for the purposes set forth.

In testimony whereof I affix my signature, 35  
in presence of two witnesses.

CREED T. MOORE.

Witnesses:

N. G. WILLIAMS, Jr.,  
L. G. FITZPATRICK.